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Montana Rural Education Curriculum Guide

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Montana Rural Teachers
Montana County Superintendents
Montana Office of Public Instruction

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Montana Rural Schools
Curriculum Guide K-8

This material is designed to provide the classroom professional some guidance as to when to introduce and develop concepts in each subject area. It is only a guide, not a rule book or complete course of study.

Although the material is presented under various subject matter headings, it is important to remember that "skills and abilities do not grow in isolation from content. In all subjects, students develop skills in using language and other symbol systems; they develop the ability to reason; they undergo experiences that lead to emotional and social maturity. Students master these skills and abilities through observing, listening, reading, talking, and writing about science, mathematics, history, and the social sciences, the arts and other aspects of our intellectual, social and cultural heritage. As they learn about their world and its heritage they necessarily deepen their skills in language and reasoning and acquire the basis for emotional, aesthetic and social growth. They also become aware of the world around them and develop an understanding and appreciation of the interdependence of the many facets of that world."*

*From *The Essentials of Education: A Call for Dialog and Action,* a position statement developed in part by NCTE in 1979 and endorsed by 22 national education organizations.

Introduction

KEY TO THIS CURRICULUM GUIDE

I -Introduced
D -Developed
M -Mastered
R -Reviewed, Reinforced
E -Extended, Expanded

	K	1	2	3	4	5	6	7	8
I. Readiness Skills									
A. Auditory Discrimination									
1. Hears and recognizes likenesses and differences in:									
a. environmental sounds (i.e., tractor, animal sounds)	I	I/M	R	R					
b. consonants and vowels	I	I/D	M	R	R				
c. rhyming words	I	I/D	D	M	R	R			
d. position words (above, below, beside, etc.)	I	I/D	M	R	R				
B. Visual Discrimination									
1. Recognizes likenesses and differences in:									
a. letters and numerals	I	I/D	M	R					
b. words	I	I/D	M	R					
c. colors	I	I/D	M	R					
d. shapes	I	I/D	M	R					
e. sizes	I	I/D	M	R					
2. Uses picture clues	I	I/D	M	R					
3. Uses word configuration	I	I/D	M	R					
4. Uses left to right progression	I	I/D	M	R	R	R	R	R	R
C. Motor Skills									
1. Utilizes gross motor skills	I	I	D	D	D	D	D	D	D
2. Utilizes fine motor skills	I	I	D	D	D	D	D	D	D
II. Word Recognition									
A. Vocabulary (varies according to exposure and materials utilized)									
1. Attains basic vocabulary appropriate to grade level:									
a. listening vocabulary	I	I/D	D	D	D	D	D	D	D
b. speaking vocabulary	I	I/D	D	D	D	D	D	D	D
c. reading vocabulary	I	I/D	D	D	D	D	D	D	D
d. writing vocabulary	I	I/D	D	D	D	D	D	D	D
2. Recognizes word meanings:									
a. multiple meanings		I	D	D	D	D	D	D	D
b. synonyms	I	I/D	D	D	D	D	M	R	R
c. antonyms	I	I/D	D	D	D	D	M	R	R

Reading

	K	1	2	3	4	5	6	7	8
d. homonyms		I	D	D	D	D	M	R	R
e. affixes			I	D	D	D	D	M	R
f. origins						I	D	D	D
g. idioms			I	D	D	D	D	D	D
B. Phonic Analysis									
1. Knows name and sounds of consonants	I	I/D	M	R					
2. Discriminates consonant sounds:									
a. initial position	I	I/D	D	M	R	R	R	R	R
b. medial position		I	D	D	M	R	R	R	R
c. final position		I	D	M	R	R	R	R	R
d. blends		I	D	D	D	M	R	R	R
e. three letter initial blends		I	D	D	D	M	R	R	R
f. digraphs		D	D	D	M	R	R	R	
3. Uses letter-sound associations to unlock new words		I	D	D	D	D	D	D	D
4. Recognizes silent letters in words		I	D	D	D	M	R	R	R
5. Hears and uses vowels:									
a. short		I	D	D	D	D	M	R	R
b. long		I	D	D	M	R	R	R	R
c. digraphs		I	D	D	D	D	M	R	R
d. dipthongs		I	D	D	D	D	M	R	R
e. irregular		I	D	D	D	D	D	M	R
6. Recognizes irregular consonant usage		I	D	D	D	D	M	R	R
7. Recognizes diacritical markings		I	D	D	D	D	M	R	R
C. Structural Analysis									
1. Uses rules and generalizations for word division:									
a. syllables		I	D	D	D	D	M	R	R
b. compound words		I	D	D	M	R	R	R	R
c. roots, prefixes, and suffixes		I	D	D	D	D	D	D	M
2. Recognizes common word families		I	D	M	R	R	R	R	R
3. Understands use of contractions		I	D	D	D	M	R	R	R
4. Understands use of apostrophe in possessives		I	D	D	D	D	M	R	R
III. Comprehension Skills									
A. Literal									
1. Uses context clues to get meanings of words	I	I	D	D	D	D	D	D	D
2. Uses punctuation as a guide to sentence meaning	I	D	D	M	R	R	R	R	R
3. Recognizes word referrents	I	D	D	M	R	R	R	R	R
4. Remembers from stories read:									
a. characters	I	I	D	M	R	R	R	R	R
b. main ideas and details	I	I	D	D	D	M	R	R	R
c. sequence of events	I	I	D	D	D	M	R	R	R
d. best title for material read	I	I	D	D	D	M	R	R	R

		K	1	2	3	4	5	6	7	8
	5. Recognizes literary forms (i.e. autobiography, biography, poetry, drama, essay, etc.)		I	D	D	D	D	D	D	M
B.	Interpretive, Critical									
	1. Understands feelings of characters	I	I	D	M	R	R	R	R	R
	2. Visualizes setting, character, and events	I	I	D	D	D	D	D	D	D
	3. Predicts outcomes	I	I	D	D	M	R	R	R	R
	4. Discriminates between reality and fantasy	I	I	D	D	M	R	R	R	R
	5. Understands figurative language			I	D	D	D	D	M	R
	6. Distinguishes fact from opinion				I	I	D	M	R	R
	7. Recognizes cause and effect				I	D	D	D	M	R
	8. Determines author's intent									
	a. point of view				I	D	D	D	D	D
	b. bias						I	D	D	D
	c. audience						I	D	D	D
	9. Recognizes propaganda techniques						I	D	D	D
	10. Makes inferences		I	D	D	D	D	D	M	R
	11. Draws conclusions		I	D	D	D	D	D	M	R
	12. Understands analogies		I	D	D	D	D	D	M	R
	13. Recognizes literary style:									
	a. humor		I	D	D	D	D	D	D	D
	b. satire								I	D
	c. irony								I	D
IV.	***Study Skills***									
A.	Directions									
	1. Follows oral	I	I	M	R	R	R	R	R	R
	2. Follows written		I	I	D	D	D	M	R	R
B.	Information handling skills									
	1. Understands use of encyclopedia to find information				I	D	D	M	R	R
	2. Uses parts of book:									
	a. table of contents		I	D	D	M	R	R	R	R
	b. glossary				I	D	M	R	R	R
	c. index				I	D	M	R	R	R
	d. figures, illustrations, subtitles, footnotes, italics, guide words, etc. to aid in study					I	D	D	D	M
	3. Uses periodicals	I	I	I	D	D	D	D	D	D
	4. Uses card catalog			I	D	D	D	M	R	R
	5. Reads and interprets simple:									
	a. tables and charts		I	D	D	D	M	R	R	R
	b. maps and atlases		I	D	D	D	D	D	M	R
	c. graphs and diagrams		I	D	D	D	M	R	R	R

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6. Determines appropriate source to use in obtaining information (i.e. dictionary, encyclopedia, index, atlas, almanac, thesaurus, readers guide, etc.)			I	I/D	I/D	I/D	M	R	R
C. Information processing skills									
1. Uses a systematic plan to approach reading and studying in the content area (i.e., SQ3R, Survey, Question, Read, Recite, Review)					I	D	D	D	M
2. Uses the following to organize information:									
a. outlining					I	D	D	M	R
b. summarizing				I	D	D	D	M	R
c. classifying	I	I	D	D	M	R	R	R	R
d. note taking			I	D	D	D	D	M	R
3. Skims for information according to difficulty of material			I	D	D	D	D	M	R
V. General Reading									
A. Reads for enjoyment		I	D	D	D	D	D	D	D
B. Reads orally with fluency, expression, understanding		I	D	D	D	D	D	D	D
C. Reads silently with fluency for meaning		I	D	D	D	D	D	D	D
D. Adjusts rate and style for reading purpose and nature of printed material				I	D	D	D	D	D

	K	1	2	3	4	5	6	7	8
I. Oral									
A. Listening									
1. Displays courteous, attentive and appropriate behavior	I	I/D	D	D	D	D	D	D	D
2. Appreciates and enjoys listening to stories, poetry, finger plays, speakers, drama, music and nature	I	I/D	D	D	D	D	D	D	D
3. Identifies both environmental and language sounds	I	I/D	D	D	D	D	D	D	D
4. Understands and follows directions (general, specific, sequential), finds answers to questions, gains new ideas and obtains accurate information	I	I/D	D	D	D	D	D	D	D
5. Distinguishes facts and logical reasoning from emotionally laden words, arguments and opinions	I	I/D	D	D	D	D	D	D	D
B. Speaking									
1. Demonstrates clear and audible speech	I	I/D	D	D	D	D	D	D	D
2. Organizes thoughts and ideas as demonstrated in:									
a. participating in classroom conversation/discussion	I	I/D	D	D	D	D	D	D	D
b. providing appropriate answers/information	I	I/D	D	D	D	D	D	D	D
c. sharing of experiences	I	I/D	D	D	D	D	D	D	D
d. giving reports and short talks	I	I/D	D	D	D	D	D	D	D
3. Communicates in complete sentences, with appropriate usage and grammar	I	I/D	D	D	D	D	D	D	D
4. Is aware of body (non-verbal) communication	I	I/D	D	D	D	D	D	D	D
5. Demonstrates memorization skills with regard to names of days, months, nursery rhymes, poetry, parts in plays	I	I/D	D	D	D	D	D	D	D
6. Displays interaction:									
a. one-to-one									
1. constructive criticism					I	D	D	D	D
2. adapting language to audience							I	D	D
b. in small groups									
1. as a leader				I	D	D	D	D	D
2. as a participant				I	D	D	D	D	
c. in large groups									
1. as a speaker				I	D	D	D	D	D
2. as a member of the audience				I	D	D	D	D	D
3. utilizes parliamentary procedure when appropriate							I	D	D

	K	1	2	3	4	5	6	7	8
7. Demonstrates the following types of speeches:									
a. oral reading		I	D	D	D	D	D	D	D
b. choral reading		I	D	D	D	D	D	D	D
c. informative speaking			I	D	D	D	D	D	D
d. persuasive speaking								I	D
e. creative dramatics	I	I/D	D	D	D	D	D	D	D
f. oral discussion	I	I/D	D	D	D	D	D	D	D
II. Written									
A Penmanship									
1. Develops small muscle coordination (tracing letters, shapes and forms, cutting, pasting, drawing, etc.)	I/D	I/D	M	R	R	R	R	R	R
2. Forms upper and lower case letters correctly:									
a. manuscript/printing	I/D	I/D	M	R	R	R	R	R	R
b. cursive			I	D	M	R	R	R	R
3. Uses left to right progression	I/D	I/D	M	R	R	R	R	R	R
4. Demonstrates good spacing and legibility		I/D	D	D	D	D	D	D	
III. Visual									
A Perception									
1. Recognizes viewpoint (i.e. spatial, etc.)	I	I/D	D	D	D	D	D	D	D
2. Understands imagery	I	I/D	D	D	D	D	D	D	D
3. Interprets body language	I	I/D	D	D	D	D	D	D	D
4. Is aware of the psychology of colors and effects, packaging and moods	I	I/D	D	D	D	D	D	D	D
B. Discrimination									
1. Recognizes sequence, reasonable order	I	I/D	D	D	M	R	R	R	R
2. Is aware of the variety and myriad of messages in mass media—electronic, print (including advertising)	I	I	I	I	I	D	D	D	D
3. Interprets symbolism	I	I	I	I	D	D	D	D	D
4. Develops audience awareness	I	I	I	I	D	D	D	D	D
5. Understands the purpose of the message and audience reaction						I	D	D	D
IV. Media Hardware (where equipment is available)									
A. Audio									
1. Utilizes tape recorder with professionally prepared materials and produces own tapes	I	I/D	D	M	M	M	M	M	M
2. Uses phonograph	I	I/D	M	M	M	M	M	M	M

	K	1	2	3	4	5	6	7	8
B. Visual									
1. Uses filmstrip viewer and projector with professional material and produces own filmstrips	I	I/D	D	D	M	M	R	R	R
2. Uses overhead projector		I	D	M	R	M	M	M	M
3. Utilizes slides and slide projector with professional material and produces own slide show			I	D	M	R	R	R	R
4. Utilizes movie projector and/or camera (8 mm, 16 mm) to view professional materials and produces own films					I	D	M	R	R
5. Utilizes video camera, recorder/player and receiver/ monitor with prepared professional tapes and discs, off air recording and produces own programs						I	D	D	D
C. Computers									
1. Enjoys games	I	D	D	M	M	M	M	M	M
2. Accesses information	I	I/D	D	D	M	M	M	M	M
3. Utilizes prepared programs	I	I/D	D	D	D	M	M	M	M
4. Produces own programs		I	I	I	I	I	I	I	I
B. Spelling									
1. Applies phonetic analysis—spells by sounds (see Reading section)	I/D	I/D	D	D	D	D	D	D	D
2. Applies basic word list		I	D	D	D	D	D	D	D
3. Spells from dictation		I	D	D	D	D	D	D	D
4. Proofreads for errors		I	D	D	D	D	D	D	D
5. Utilizes dictionary to check spelling		I	D	D	D	D	D	D	D
C. Mechanics									
1. Applies usage of capitalization to:		I	D	D	D	D	M	R	R
a. sentence beginnings, "I", proper nouns, initials		I	D	D	M	R	R	R	R
b. acronyms, deities, brand names						I	D	D	D
2. Applies conventions of punctuation:									
a. period, quotation mark, exclamation point, apostrophe, question mark, comma, underlining of titles		I	D	D	D	D	M	R	R
b. colon, semicolon, hyphen, parenthesis, ellipsis, and quotation marks in titles					I	D	D	D	D
3. Applies correct usage to:									
a. recognize word order		I	D	M	R				
b. recognize phrases and sentences		I	M	R					
c. construct statements, questions, exclamations and commands				I	D	D	M	R	R
d. construct simple sentences		I	D	D	M	R	R	R	R
e. construct compound sentences				I	D	D	M	R	R
f. construct complex sentences						I	D	D	M
g. construct sentences of varying patterns								I	D

		K	1	2	3	4	5	6	7	8
4	Understands parts of speech:									
a	nouns, verbs		I	D	D	D	D	M	R	R
b.	pronouns			I	D	D	D	M	R	R
c.	adjectives and adverbs				I	D	D	D	D	D
d.	conjunctions and prepositions				I	D	D	D	D	D
e.	interjections					I	D	D	D	D
f.	verbals									I
D.	Dictionary Skills									
1.	Alphabetizes words		I	D	D	M	R	R	R	R
2.	Understands use of dictionary to find word meanings (See Word Recognition in Reading section)		I/D	D	D	M	R	R	R	R
3.	Understands the use of pronunciation key, diacritical markings and accent marks for correct pronunciation		I/D	D	D	M	R	R	R	R
4.	Finds word origins					I	D	D	D	M
E	Composition									
1.	Brainstorms	I	I/D	D	D	D	D	D	D	D
2.	Expresses creativity in a variety of written forms (poetry, plays, stories)	I	D	D	D	D	D	D	D	D
3.	Demonstrates personal writing (diaries, journals, free writing)			I	D	D	D	D	D	D
4.	Composes friendly and business letters			I	D	D	D	D	D	M
5.	Can write instructions clearly and in proper sequence				I	D	D	D	D	M
6.	Understands functions of a rough draft						I	D	D	D
7.	Understands and uses revision					I	D	D	D	M
8.	Edits his/her own work					I	D	D	D	M
9.	Understands biography and autobiography				I	D	D	D	D	M
10.	Recognizes a variety of media forms (journalistic writing)					I	D	D	D	D
11.	Knows outlining skills					I	D	D	D	M
12.	Understands the function of a paragraph						I	D	D	D
13.	Is able to write a multi-paragraph composition							I	D	D
14.	Understands and uses bibliography							I	D	D
15.	Understands and uses summaries							I	D	M
16.	Understands the purpose and use of peer editing									I
17.	Applies reference and writing skills in developing a research paper									I

		K	1	2	3	4	5	6	7	8
I.	***Numeration***									
A.	Counts to 20	I	I/D	D	M	R				
B.	Counts by: 1's, 5's, 10's—0-100		I	D	M	R				
C.	Counts by: 1's, 5's, 10's, 100's—0-999			I	D	M	R			
D.	Counts by: 1's, 5's, 10's, 100's—0-999,999				I	D	M	R		
E.	Reads, writes, orders numbers:									
	1. ones	I	I/D	M	R					
	2. tens		I	D	M	R				
	3. hundreds			I	D	M	R			
	4. thousands				I	D	M	R		
F.	Identifies: sets, numbers, numerals 0-10	I	D	M	R					
G.	Places value of ones and tens		I	D	M	R				
H.	Places value of hundreds			I	D	M	R			
I.	Places value of thousands				I	D	M			
J.	Places value of millions					I	D	M	R	
K.	Places value of billions						I	D	M	R
L.	Ordinals through ten		I	D	M	R				
M.	Recognizes symbols:									
	1. +, −, =, ¢, $		I	D	M	R				
	2. x			I	D	M	R			
	3. ÷, ⌐				I	D	M	R		
N.	Compares numbers using > and <		I	D	D	D	D	M	M	R
O.	Converts whole numbers to expanded notation through hundred thousands				I	D	D	M	R	
P.	Identifies even and odd numbers		I	D	M	R				
Q.	Applies terms:									
	1. sum, difference		I	D	D	M	R			
	2. product, quotient			I	D	M	R			
R.	Rounds to hundred thousand					I	D	D	M	R
S.	Knows symbols and converts roman numerals to 1000		I	I	I	D	D	M	R	
T.	Expresses whole numbers in expanded exponential form							I	D	M
II.	***Money***									
A.	Recognizes coins and the value: penny, nickel, dime, quarter		I	D	M	R				
B.	Counts coins of same value		I/D	D	M	R				
C.	Counts and adds combination of coins to one dollar		I	D	M	R				
D.	Identifies half dollar and dollar			I	D	M	R			
E.	Adds all values of coin combinations		I	I/D	D	M	R			
F.	Makes change		I	D	M	R				
III.	***Basic Facts and Computation***									
A.	Adds and subtracts facts 0-18		I	D	M	R				
B.	Adds and subtracts 2 and 3 digit numbers without regrouping			I	D	M	R			

		K	1	2	3	4	5	6	7	8
C.	Adds and subtracts 2 and 3 digit numbers with one regrouping			I	D	M	R			
D.	Adds and subtracts with one and two regrouping			I	D	M	R			
E.	Adds 3 numbers		I	D	M	R				
F.	Adds 3 numbers with 2 or 3 digit addends				I	D	M	R		
G.	Adds and subtracts 4 digit numbers					I	D	M	R	
H.	Identifies families of facts for addition and subtraction				I	D	M	R		
I.	Checks subtraction problems by addition			I	I	D	M	R		
J.	Multiplies facts through 9			I	D	M	R			
K.	Divides facts through 9			I	I/D	M	R			
L.	Extends families of facts to multiplication and division			I	I/D	M	R			
M.	Multiplies 2 digit numbers				I	D	M	R		
N.	Multiplies 3 x 3 digit numbers					I	D	M	R	
O.	Divides by 2 digit divisors					I	D	M	R	
P.	Divides with 3 digit divisors						I	D	M	R
Q.	Adds and subtracts 4 digit numbers					I	D	M	R	
R.	Multiplies and divides 4 digit numbers					I	D	D	M	R
S.	Estimates sums, products, differences and quotients			I	I	D	M	M	R	
T.	Interprets whole numbers in expanded form		I	I	I/D	D	M	R		
IV.	***Fractions***									
A.	Can demonstrate fraction as part of whole			I	D	D	M	R		
B.	Can write and compare fractions using pictures				I/D	I/D	M	R		
C.	Can demonstrate meaning of fraction, improper fractions, and proper fractions; numerator, denominator, and mixed numbers				I	I	I/D	D	M	
D.	Can order fractions						I	I/D	D	M
E.	Write equivalent fractions						I	D	M	R
F.	Convert improper fractions to mixed numbers and conversely				I	I	M	R		
G.	Add and subtract fractions with like denominators						I	I/D	M	
H.	Add and subtract fractions with unlike denominators							I	D	M
I.	Add and subtract fractions with mixed numbers						I	D	M	
J.	Multiply and divide fractions							I	D	M
K.	Multiply and divide mixed numbers							I	D	M
V.	***Decimals***									
A.	Can read and write decimals:						I	I/D	D	M
	1. order decimals						I	I/D	D	M
	2. convert between fractions to decimals						I	I/D	D	M
	3. round off decimals						I	I/D	D	M
	4. add and subtract decimals						I	D	M	
	5. multiply and divide decimals							I	D	M

		K	1	2	3	4	5	6	7	8
VI.	***Ratio—Proportion***									
A.	Can demonstrate the meaning of ratio						I	I/D	M	R
B.	Can construct equivalent ratios						I	I/D	M	R
C.	Can demonstrate meaning of proportion							I	D	M
D.	Can determine missing term in proportion							I	D	M
VII.	***Percent***									
A.	Can demonstrate % as part of 100							I	D	M
B.	Can convert between %, fraction, decimal							I	D	M
C.	Can determine % of number							I	D	M
D.	Can determine what % one number is of another							I	D	M
E.	Can interpret problems using %								I/D	D
VIII.	***Number Theory***									
A.	Can demonstrate:									
	1. prime factorization							I	D	M
	2. prime and composite numbers							I	D	M
	3. divisibility rules							i	d	m
	4. greatest common factor							I	D	M
	5. least common multiple							I	D	M
	6. meaning exponent							I	I/D	M
B.	Convert from exponential form to whole number form (ex. $5^2 = 25$)								I	D
C.	Can determine the square root of a number with a calculator, computer, or set of tables								I	I/D
IX.	***Measurement***									
A.	Compares size, length and positions	I	D	M	R					
B.	Measures inches with rulers		I	D	M	R				
C.	Measures centimeters and meters with rulers			I	D	M	R			
D.	Measures ½ inch, foot, yard			I	D	M	R			
E.	Tells time to hour, ½ hour, ¼ hour, and minute		I	I/D	D	M	R			
F.	Read and use calendar: week, month, year			I	I/D	D	M	R		
G.	Measures perimeter			I	D	M	R			
H.	Measures mass (kg , g)				I	D	M	R		
I.	Measures weight				I	D	M	R		
J.	Understands temperature (Celsius, Fahrenheit)				I	D	M	R		
VI.	***Geometry***									
A.	Identifies basic shapes	I	I/D	D	M	R				
B.	Classifies geometric shapes		I	D	M	R				
C.	Understands symmetry with basic shapes			I	D	M	R			
D.	Identifies open and closed figures			I	D	D	M	M	R	R
E.	Identifies different angles and polygons						I	I/D	D	M
F.	Identifies and illustrates point, line, line segment, ray, parallel, and perpendicular						I	I/D	D	M

		K	1	2	3	4	5	6	7	8
G.	Identifies circle, radius, chord, diameter, circumference							I	I/D	M
H.	Understands coordinated graphing				I	D	D	M	M	R
I.	Demonstrates meaning of linear, angular, area, and volume measure						I	I	I/D	D
J.	Computes perimeter of polygons, area of triangles, parallelograms, trapezoids, volume of right prisms							I	I/D	D
K.	Can compute circumference and area of circle								I	D
L.	Uses compass and protractor for measuring and constructing							I	I/D	D
M.	Identifies congruent and similar figures							I	D	M
N.	Applies pythagorean rule							I	D	M
XI.	***Statistics***									
A.	Understands bar graphs and grids				I	D	D	M	R	R
B.	Reads pictographs, bar and line graphs			I	I	D	D	M	R	R
C.	Organizes data into graph						I	I/D	I/D	M
D.	Organizes data in frequency distribution								I	I/D
E.	Determines mean, median and mode given data								I	I/D
XII.	***Integers***									
A.	Determines order of integers (positive and negative)								I	D
B.	Computes with integers								I	I/D
XIII.	***Algebra***									
A.	Can identify open and closed sentences							I	I/D	D
B.	Can replace unknowns in sentence or algebraic expression							I	I/D	D
C.	Determines solution set of simple open sentence by replacement								I/D	D
D.	Determine solution to simple algebraic equation (ax + b = c)									I I
E.	Can make a table and graph simple linear equations									
XIV.	***Application and Problem Solving***									
A.	Demonstrates direction: right, left, top, bottom, etc.	I/D	D	M	R					
B.	Classifies objects and sequences objects	I	D	M	R					
C.	Identifies placement of numbers on number line		I/D	D	M	R				
D.	Uses number line for +, and —			I/D	D	M	R			
E.	Uses number line for x, and ÷			I	D	M	R			
F.	Can identify and develop patterns		I	I	I	I/D	I/D	I/D	I/D	I/D
G.	Solves number sentences for pictured and non-pictured story problems		I	D	D	D	D	D	D	D
H.	Writes number sentences for pictured and non-pictured story problems	I	D	D	D	D	D	D	D	D
I.	Solves word problems using number sentences for (+) and (—)	I	D	D	D	D	D	D	D	D
J.	Solves word problems using (x) and (÷)				I	D	D	D	D	D
K.	Can solve two-step story problems				I	D	D	D	D	D

I. *Life Science*	K	1	2	3	4	5	6	7	8
A. Animals									
1. Identify and classify animals (wild, pre-historic, species, etc.)	I	I	D	D	D	D	M	E	
2. Describe the factors necessary for animal survival	I	I	D	M	R	R	R	R	
3. Observe and describe the similarities and differences of animals with respect to size, shape, coverings, locomotion, habitats, needs and reproduction	I	I	D	D	D	D	M	R	
4. Describe the care required for domestic animals and pets	I	I	D	M	R	R	R	R	
5. Describe characteristics of animal classes: vertebrates (reptiles, birds, fish, amphibians, mammals) and invertebrates		I	D	D	D	D	M	R	
6. Identify the different stages of development in the life cycles of specific animals		I	D	D	D	D	M	R	
7. Identify similarities and differences in animals' habits and behaviors	I	I	D	D	D	D	D	D	
8. Observe and communicate how animals adapt to their environment	I	I	D	D	D	M	E	E	
9. Compare the needs and life of simple animals with the needs and life of more complex animals			I	D	D	D	D	M	E
10. Discuss the interrelationships between man, animals and environments			I	D	D	D	D	D	D
11. Identify endangered species and methods of protection				I	D	D	M	E	E
12. Analyze animal communities						I	D	D	D
B. Plants									
1. Plant seeds and record observations	I	D	M	E	E				
2. Identify plants native to the area		I	D	D	D	D	M	E	E
3. Compare plants with respect to size, shape, structure, needs, reproduction and uses		I	D	D	D	D	D	D	D
4. Investigate the conditions necessary for plant growth			I	D	M	R			
5. Identify the various stages of development in the life cycles of specific plants		I	D	D	D	M	E	E	E
6. Classify plants according to similarities and differences in roots, stems, leaves and flowers				I	D	D	D	D	D
7. Identify the basic parts of plants and their functions			I	D	D	D	D	M	R
8. Explain the way green plants produce food through photosynthesis					I	D	D	M	R
9. Categorize plants into classes: algae, fungi, lichens, mosses, ferns, trees, and flowering plants					I	D	D	D	M
10. Identify methods of plant reproduction						I	D	D	D
11. Describe the uses of plants (e.g., food, oxygen, decomposition, cycling)				I	D	D	M	E	E
12. Analyze how plants adapt to environmental changes						I	D	D	M
13. Illustrate and communicate the interrelationships of plants and animals in food chains		I	I	D	D	D	D	D	D

	K	1	2	3	4	5	6	7	8
14. Discuss the interrelationships between man and plants (positive and negative effects)		I	D	D	D	D	D	D	M
15. Identify endangered plant species and methods of protection						I	D	M	E
16. Analyze plant communities						I	D	D	D
C. Microorganisms									
1. Observe and record the growth and changes of molds and their environments			I	D	D	D	M	E	E
2. Explore functions of microorganisms (e.g., food chains, leaven, decomposition, medical uses)						I	D	D	D
3. Use a microscope and other instruments of observation		I	D	D	D	D	D	D	D
4. Identify types of microorganisms: plants, animals, viruses, rickettsia						I	D	D	M
5. Determine the effects of microorganisms on the environment (e.g., diseases and decomposition)						I	D	D	D
6. Identify the parts of the cell						I	D	D	M
7. Classify microorganisms as producers and non-producers of food and energy							I	D	D
D. Environment									
1. Explore and develop sensory awareness	I	I	D	D	D	D	D	D	
2. Explore and compare various environments			I	D	D	D	D	D	
3. Identify the components of a natural environment: air, water, soil		I	D	D	M				
4. Analyze the interrelationship between man-made and natural environments				I	D	D	D	D	
5. Discover patterns in nature (visual patterns, rhythms, cycles, migration, etc.)			I	D	D	D	D	D	
6. Define ecosystem and cite examples				I	D	D	M	E	
7. Explore the likenesses and differences of niches, populations, and communities in various environments			I	D	D	D	D	D	
8. Chart and compare food webs of a variety of ecosystems				I	D	D	D	M	
9. Analyze the interaction and interdependence within and among ecosystems (Nothing exists in isolation.)					I	D	D	D	D
10. Provide examples of the principle that living and non-living things are constantly changing, but are not destroyed						I	D	D	M
11. Analyze the adaptative characteristics which enable plants and animals to survive		I	D	D	D	D	D	D	
12. Investigate ways that man changes his natural environment (e.g., conservation, land and resource use, population, pollution)		I	D	D	D	D	D	D	
13. Investigate ways man affects other living things (e.g., plant and animal populations, endangered species)			I	D	D	D	D	D	D
14. Determine ways of maintaining an ecological balance (Concept: natural ecosystems are self-regulating.)				I	D	D	D	D	D
15. Explore each individual's responsibility for his/her environment	I	I	D	D	D	D	D	D	D
16. Participate in outdoor activities to investigate environments and ecosystems	I	I	D	D	D	D	D	D	D

		K	1	2	3	4	5	6	7	8
II.	***Physical Science***									
A.	Matter									
1.	Define living and non-living matter		I	D	D	M	E	E	E	E
2.	Classify matter in terms of color, size, shape, texture, and similar characteristics		I	D	D	M	E	E		
3.	Produce and communicate about changes in matter through simple experiments		I	D	D	D	D	D	D	M
4.	Identify the states of matter: liquids, solids, gases		I	D	D	D	M	E		
5.	Identify and describe properties of solids, liquids, and gases						I	D	D	M
6.	Experiment with combining and separating forms of matter (i.e., physical and chemical changes)				I	D	D	D	D	D
7.	Describe the structure and composition of matter and of the chemical changes in matter (atoms, molecules, elements, compounds)						I	D	D	D
8.	Experiment with measurement of matter		I	D	D	D	D	D	D	D
9.	Demonstrate safety rules in laboratory activities	I	D	D	D	M	E	E	E	E
B.	Energy									
1.	Define kinetic and potential energy				I	D	D	M	E	E
2.	Explore sound, hearing, light, and electricity as forms of energy	I	D	D	D	D	D	D	D	D
3.	Describe and evaluate various sources of energy (solar, nuclear, thermal, wind, fossil fuels, etc.)				I	D	D	D	D	D
4.	Explain why man needs energy and how he uses it				I	D	D	D	D	D
5.	Discuss problems involved with developing and using various energy sources						I	D	D	D
6.	Define and experiment with the relationship between work and energy						I	D	M	E
7.	Communicate how energy can be transferred (e.g., convection, conduction, absorption, reflection, transmission)							I	D	D
8.	Develop ideas for conserving energy		I	D	D	D	D	D	D	D
9.	Design and construct objects that demonstrate the uses of various sources of energy			I	D	D	D	D	D	D
C.	Forces and Machines									
1.	Observe and describe the way in which matter can be moved (pushing, pulling, lifting)	I	D	D	M	R				
2.	Demonstrate an understanding of simple and compound machines				I	D	D	M	E	E
3.	Describe friction. Describe friction and lubrication and produce examples				I	D	D	M	R	R
4.	Describe the relationships between work and the machines and produce examples						I	D	D	M
5.	Discuss the force of gravity and its effect on machines (e.g., inertia, centrifugal force)						I	D	D	M
6.	Construct simple machines				I	D	D	M	E	E
7.	Research the development of man's use of machines						I	D	D	D
D.	Magnetism and Electricity									
1.	Experiment with magnetism	I	D	D	D	M	E	E		
2.	Explore the possible uses of magnetism					I	D	D	D	D

		K	1	2	3	4	5	6	7	8
3.	Describe the relationship between magnetism and electricity							I	D	D
4.	Compare and contrast static and current electricity and explain how each is produced, conducted and used							I	D	D
5.	Construct and experiment with electrical circuits						I	D	M	E
6.	Measure and compare the amounts of electricity used in various situations							I	D	D
7.	Describe safety practices around electricity		I	D	D	D	M	E	E	E
III.	***Earth and Space Science***									
A.	Geology									
1.	Observe and describe the three main non-living parts of the earth: rocks and soils, water, and air		I	D	M	R				
2.	Describe the sources and forms of water on the surface of the earth				I	D	D	M	R	R
3.	Study the importance of the oceans			I	D	D	D	D	D	D
4.	Classify rocks and minerals according to color, size, shape, hardness, composition, and relative weights				I	D	D	M	R	
5.	Identify soil as being composed of tiny particles of material mixed with other materials				I	D	M	E	E	E
6.	Describe ways the earth has changed over millions of years					I	D	D	D	M
7.	Identify and describe types, appearances, and characteristics of landforms (Make topographic maps, etc.)				I	D	D	M	E	E
8.	Identify the three layers of the earth: crust, mantle, and core, and the basic composition of each				I	D	M	R		
9.	Describe the effects of erosion and weathering on the earth's surface				I	D	D	D	D	M
10.	Differentiate between earthquakes, volcanoes, and geysers, and explore conditions necessary for each to occur (Make models, etc.)				I	D	D	D	D	D
11.	Describe the formation of glaciers and their effects upon the earth's surface				I	D	M	R		
12.	Learn to use and construct maps, models, and other visual aids		I	D	D	D	D	D	D	D
13.	Examine fossils and discuss their origins		I	D	D	D	D	M	E	E
14.	Generalize and infer from indirect evidence the theories of the earth's composition, past and present activity						I	D	D	D
15.	Explore the geology of your area				I	D	D	D	D	D
16.	Investigate land management (mining, farming, forestry, industry, recreation, and other uses)						I	D	D	D
17.	Evaluate various viewpoints regarding use of resources						I	D	D	D
B.	Weather and Climate									
1.	Identify and describe weather conditions typical of various seasons of the year and/or sections of the country	I	I	D	D	D	D	D	D	M
2.	Collect and record information about daily weather conditions		I	D	D	M	E	E		
3.	Acquire a basic understanding of the water cycle and its importance to man			I	D	D	D	M		
4.	Differentiate between types of clouds and the weather usually associated with each				I	D	D	D	M	E

	K	1	2	3	4	5	6	7	8
5. Identify and describe different types of storms (e.g., thunderstorms, hurricanes, and tornadoes)				I	D	D	M	E	
6. Use common weather instruments and maps			I	D	D	D	D	D	D
7. Define and measure air pressure and discuss its relationship to weather						I	D	D	M
8. Describe the characteristics and composition of the atmosphere						I	D	D	D
9. Communicate the interrelationships between man, weather and climate, and plant and animal life		I	D	D	D	D	D	D	
C. Astronomy									
1. Identify how our solar system consists of the sun, moon, and planets		I	D	M	E	E			
2. Identify and describe the characteristics, relative positions, and movement of the members of the solar system (rotation and revolution)			I	D	D	D	M	E	
3. Illustrate the relationship between the moon and tides						I	D	D	
4. Differentiate between a star and a planet				I	M	E			
5. Acquire a basic understanding of constellations, galaxies, meteors, asteroids, comets, and planetoids					I	D	D	D	
6. Learn to locate and identify stars and constellations				I	D	D	D	D	D
7. Differentiate between a solar system, galaxy, and universe						I	D	M	R
8. Describe the instruments used in astronomy and experiment with some					I	D	D	D	D
9. Discuss gravity and weightlessness				I	D	D	D	D	D
10. Discuss astronomy-related concepts such as mass, density, time, and perpetual motion						I	D	D	D
11. Experiment with the principles of flight				I	D	D	D	D	D
12. Research the history of astronomy, space travel, and the current space program					I	D	D	D	D
13. Speculate about future uses of space					I	D	D	D	D
14. Research and communicate about unexplained phenomenon					I	D	D	D	D
General Learning Suggestions									
1. Report on notable scientists and inventors				I	D	D	D	D	
2. Explore career possibilities in various fields of science				I	D	D	D	D	
3. Develop and use a procedure for scientific investigation					I	D	D	D	
4. Exhibit curiosity about the world around you	I	I	D	D	D	D	D	D	
5. Apply your scientific knowledge and processes to everyday life	I	I	D	D	D	D	D	D	
6. Develop an aesthetic appreciation of nature	I	I	D	D	D	D	D	D	
7. Integrate science into your other subject areas (e.g., art, language arts)	I	I	D	D	D	D	D	D	
8. Keep student notebooks or other records of your scientific investigations throughout the year		I	D	D	D	D	D	D	
9. Discuss and report on current scientific events in the news	I	I	D	D	D	D	D	D	
10. Plan and set up a science learning center, a game, a "science corner," etc.				I	D	D	D	D	D
11. Use reference materials to research and extend your scientific investigations				I	D	D	D	D	D
12. Design your own experiments					I	D	D	D	D

		K	1	2	3	4	5	6	7	8
I.	***School***									
A.	Knows school personnel and surroundings	I	I	M						
B.	Knows school rules	I	I	D	D	D	D	D	D	D
C.	Deals with attitudes people display	I	I	D	D	D	D	D	D	D
D.	Understands different personal characteristics and traits	I	I	D	D	D	D	D	D	D
II.	***Home and Family Living***									
A.	Defines home	I	I	M	R					
B.	Understands family structure	I	I	D	M					
C.	Understands members' responsibilities	I	I	D	D	D	D	D	D	D
D.	Recognizes different types of clothing	I	I	D	D	D	D	D	D	D
E.	Recognizes different types of shelters	I	I	D	D	D	D	D	D	D
III.	***Communities and Their Helpers***									
A.	Identifies the ties between peoples' needs and behaviors within a given community	I	I	D	D	D	D	D	D	D
B.	Matches tools and materials with occupations	I	I	D	D	D	D	D	D	D
C.	Describes different food sources	I	I	D	D	D	D	D		
D.	Recognizes community areas and their purposes		I	D	D	M	R			
E.	Describes how families and children live, work and play in another given country			I	D	D	D	D	D	D
IV.	***Holidays and Seasons***									
A.	Understands meanings and customs	I	I	D	D	D	D	D	D	D
B.	Understands calendar (months, days of week)	I	I	D	D	M				
V.	***Transportation and Communication***									
A.	Knows different ways of travel	I	I	D	D	D	D	D	D	D
B.	Knows different ways messages are sent	I	I	D	D	D	D	D	D	D
VI.	***Geography***									
A.	Skills									
	1. Interprets flat maps and geographical locations and relations	I	I	D	D	D	D	D	M	R
	2. Interprets globe—continents and oceans	I	I	D	D	D	D	D	M	R
	3. Uses terms related to direction and location		I	I	D	D	D	D	M	R
	4. Knows the use of compass			I	D	M	R	R	R	R
	5. Uses charts, diagrams, graphs, tables		I	D	D	D	D	D	D	M
	6. Recognizes national, continental and world regions									
B.	Natural Environments									
	1. Is aware of ecology and protecting environment	I	I	D	D	D	D	D	D	D
	2. Knows the use of natural resources			I	D	D	D	D	D	D
	3. Knows the use of human resources				I	D	D	D	D	D
VII.	***Citizenship and Government***									
A.	Knows history, care, and respect of flag	I	I	D	D	M	R	R	R	R
B.	Is aware of current events	I	I	D	D	D	D	D	D	D
C.	Recognizes relationship between rights and responsibilities of others	I	I	D	D	D	D	D	D	D

Social Studies

		K	1	2	3	4	5	6	7	8
D.	Examines how people and government are related			I	D	D	D	D	D	D
E.	Recognizes steps involved in making decisions			I	D	D	D	D	D	D
F.	Recognizes how self and others feel is important in problem-solving				I	D	D	D	D	D
G.	Recognizes importance of education in citizenship	I	I	D	D	D	D	D	D	D
H.	Knows the rights and freedom given by the United States Constitution and Bill of Rights					I	I	D	D	D
VIII.	***History***									
A.	World History									
	1. Understands people, places and events					I	I	D	D	D
	2. Learns about anthropology and archaeology					I	I	D	D	D
	3. Knows chronological sequence					I	I	D	D	D
	4. Is aware of origin of civilization and its development					I	I	D	D	D
B.	U.S. History									
	1. Understands people, places and events	I	I	I	I	D	D	D	D	D
	2. Interprets historical change and progress						I	D	D	D
	3. Knows chronological sequence					I	D	D	D	D
	4. Knows foreign policy—past and present					I	I	D	D	D
C.	Montana									
	1. Understands people, places and events	I	I	I	I	I	I	D	D	D
	2. Interprets historical change and progress					I	D	D	D	D
	3. Knows chronological sequence					I	D	D	D	D
	4. Knows state and local government								I	I
IX.	***Economics***									
A.	Knows interaction between consumers and producers of goods and services			I	D	D	D	D	D	D
B.	Knows theories, systems, structures and processes					I	I	D	D	D

1. Art is a deeply meaningful language we read, speak and use everyday whether we realize it or not. That's why we need to teach art as a language— to be "read" and "spoken" with some understanding and ability.

   a. To "read" art
      (1) seeing special meanings in our own life experiences
      (2) understanding special meanings in the art of others

   b. To "speak" art
      (1) making our own artwork
      (2) making our own statements about others' art

   c. To "teach" art
      (1) helping students to "speak" their own ideas and feelings through art
      (2) helping students to "read"—understand and appreciate—the art statements of their own and others

2. Art and the Curriculum

   a. Art can be taught separately, **and** art can be yoked to all subjects through the whole school curriculum.

The Art Process and Product

1. Who am I? How do I see and experience my world?

   a. Give students fresh new experiences around which to build their art statements. Ask them to look for, feel, listen to, try: sizes, shapes, lines, textures, colors, groupings, designs, etc.

      For instance:
      (1) take a walk and observe inside/outside the school, front/back yard, alleys, ranches, parks, mountains/sky/prairie, downtown, machines, junk yards, rodeos, etc.
      (2) examine wood, earth, stones, grass, bones, leather, sand, cloth, flowers, sidewalk, cracks, tree branches, bicycle spokes, clouds, machine parts, pets, etc.
      (3) bring favorite things from home
      (4) look in family scrapbooks and photograph books
      (5) collect town stories, family stories
      (6) talk about/do favorite hobbies, sports
      (7) go to a grocery store (look for shapes, colors, lines)
      (8) use themes like current local events, festivals, seasons
      (9) set up interesting "arrangements" in the classroom

2. What was important and interesting to me? Why? What am I going to say about it?

   a. select favored parts of the visual and felt experiences

3. How am I going to say it? (subject, materials, tools, techniques)

   a. try/make/fashion/produce something from what was experienced
   b. make it bigger than/smaller than/same size
   c. make it two-dimensional, three-dimensional
   d. work individually or in groups

4. O.K. I've said it! (art piece is made)

   a. I have one-of-a-kind things to say through my art
   b. if I have to be graded, will it be for basic effort & attitude, completing the task, growing originality, fluency of ideas
   c. will I be encouraged to evaluate my work **by my own** feelings and criteria, as well as what others think
   d. will I be encouraged (as I get older) to ask for helpful evaluation from others as I perceive the need for it

5. What important things am I going to experience, feel and say next?

Suggested resources: *Arts & Crafts, A Handbook of Arts and Crafts,* Wrigg and Wankelman, Wm. C. Brown, Co., Publishers, 4th ed., 1978; Art Curriculum Packet, OPI, Helena, MT 59620.

Start Up Ideas, Activities, Materials Techniques, Concepts for Teachers

Kindergarten

2-dimensional: sponge painting, finger painting; wet brush on wet paper, wet brush on dry paper; drawing with paint, sides of crayons, charcoal, chalk, felt pens; making life-size body outlines; using primary colors—red, yellow, blue; cut and torn paper; vegetable and gadget prints, sandpaper prints; crayon rubbings; designs using simple shapes

3-dimensional: junk sculpture, clay, large yarn or string used for outlines; stick 'n stack puppets

Reminders to Teachers

- encourage originality
- "I am a unique person."
- "I am naturally innovative and creative if allowed and encouraged to be."
- "I have one-of-a-kind things to say through my art."
- "Please accept my world as I see it and say it."
- "Art is a language through which I speak my ideas."

Grade 1

2-dimensional: blotted and spatter painting, crayon on textiles, tempera over crayon, chalk on wet paper, tempera and finger paint, cut and torn paper, crayons, chalk, felt pens, sponge painting, monoprints, brush drawing with sticks and twigs, finger painting, leaf rubbings, designs using motifs from nature

3-dimensional: paper weaving, clay, yarn fabric design, masks, sack and stick puppets, stuffed paper sculpture, clay modeling, papier-mache mosaics out of paper/seeds/pebbles, collage design (papers, feathers, fabrics, etc.). constructions

Concepts for Teachers

- Line—thick/thin, straight/curved, long/short
- Shape—circle/square, rectangle/triangle
- Texture—rough/smooth, hard/soft
- Colors—red, yellow, blue, white, black, bright/dull, light/dark

Grade 2

2-dimensional: painting and chalks on textured surfaces, printing with cut cardboard and styrofoam, wax (crayon) resist, blotted paper, mural/group pictures, tempera and finger paints, felt pens, sponge and spatter painting, mono prints, crayon on textiles, chalk on wet paper

3-dimensional: clay-add to, take away, cut away, emboss; simple fiber weaving, fabric puppets, dioramas, wood scrap sculpture, masks, yard and fabrics added to surfaces, structures, puppets, papier-mache

Concepts for Teachers

- Line – direction, radial, spiral, grouped, vertical, horizontal. Line can enclose space & form shapes
- Shapes – geometric free form
- Space – around and between shapes
- Color – primary colors mixed to make orange green, indigo, violet, brown, dark/light, bright/dull
- Texture – visual/tactile differences, rough, bumpy, raised, shiny, etc.

Grades 3 & 4

2-dimensional: graphics, rubbings, ink-drawings, charcoal, roll-on printing, chipped and ironed crayons, felt markers, opaque paints, crayons, chalks, drawing, gadget and nature prints, foam/sponge/spatter painting, paint and chalk on textured surfaces, water colors (sunsets, water reflections), built-up block prints, blotted paper (folded and rolled)

3-dimensional: sculpture, textiles, tie-dye, simple loom weaving, clay and wood sculpture, stitchery, straw weaving, spool weaving, sock puppets, simple batik, banners, paper sculpture, paper weaving, puppets (sack, stick, finger), additive clay principles, dioramas

Concepts for Teachers

- Line – quiet/exciting, active/passive, strong/weak
- Shape – related, like/unlike
- Color – mix secondary colors from primary – green, orange, violet
- Value of color – degree of dark/light, light existing in color and in black and white
- Space – interior, exterior
- Form – a 3-dimensional shape
- Balance – uneven/even, formal/informal
- Unity – grouping, overlapping/repeating, related to other forms
- Emphasis – important/less important
- Repetition and variety – of pattern
- Rhythm – measured and grouped
- Pattern – regular repetition of line, colors, shapes

Grades 5 & 6

2-dimensional: graphics and murals, lettering, painting, block printing, silkscreening, tempera and watercolor paint techniques, printing on paper and textiles, charcoal, watercolor, mixed media, painting techniques

3-dimensional: coil pottery, rug hooking, loom weaving, basketry, simple jewelry-making, marionettes, mosaics, applique, stitchery, weaving techniques, carving

Concepts for Teachers

- Line – direction, diagonal, parallel, repeated, pattern-forming, interlacing (twisted, braided, woven, broken, continuous contour, moving/stationary
- Shape – overlapping, varying size, placement, balance of light and shadow
- Texture/pattern – texture vs. pattern, design, precise/irregular, texture & pattern in everyday environment
- Color – opaque & transparent, mixing intermediate colors, matching hue intensity; dull/bright, warm/cool in same hue; dark/light
- Space/form – perspective formed by different size & placement on page formed by overlapping, by light/dark
- Balance – informal/formal; radiation from center point for circular movement & formality
- Unity – overall effect
- Emphasis – created through contrasting hues, intensities, values, sizes, shapes, textures
- Point of view – above/below, inside/outside, in front of/behind
- Proportion – size relationship

Grades 7 & 8

2-dimensional and 3-dimensional: illustration, watercolors, tempera, arcylics, woodcuts, linoleum prints, etching, silkscreen, modeling, carving, constructions, forming clay (thrown, coil, slab), macrame, puppetry, batik, weaving, stitchery, collage, applique

Concepts for Teachers

- Line – hidden and contour (outline)
- Shape – line, pattern & design, shadows and light source
- Color – emotional impact
- Value – dark values appear closer than light values
- Space – cool colors give greatest appearance of distance
- Balance – symmetrical/asymmetrical
- Unity – through groupings
- Emphasis – use images clear or blurred
- Repetition – through rhythmic sequence
- Proportion – in relation to structure of the human body, living things and objects
- Movement – hidden/defined

		K	1	2	3	4	5	6	7	8
I.	***Singing***									
A.	Sings for enjoyment	I	I	D	D	D	D	D	D	D
B.	Sings with correct posture and breathing	I	I	D	D	D	D	D	D	D
C.	Sings by rote with scale and rhythm patterns	I	I	D	D	D	D	D	D	D
D.	Builds repertoire—a lifetime of songs (nursery rhymes, holiday songs, simple rounds, songs for enjoyment)	I	I	D	D	D	D	D	D	D
E.	Takes part in singing games	I	I	D	D	D	D	D	D	D
F.	Uses all ranges of the voice (high-low, loud-soft)	I	I	D	D	D	D	D	D	D
G.	Sings and performs solo	I	I	D	D	D	D	D	D	D
H.	Identifies note movement (step up-step down; skip up-skip down)			I	D	D	D	D	D	D
I.	Sings simple "two part" rounds			I	D	D	D	D	D	D
J.	Sings scale pattern (C-D-E-F-G-A-B-C) or (do-re-mi-fa-sol-la-ti-do) or (1-2-3-4-5-6-7-8)				I	I	D	D	D	D
K.	Uses dynamics (changes in music—P= soft; f= loud)			I	I	D	D	D	D	D
L.	Sings chord line tonal patterns (C-E-G or do-mi-sol) or 1-3-5)					I	D	D	D	D
M.	Sings "two part" music					I	D	D	D	D
N.	Recognizes whole and half steps (building scales)							I	D	D
O.	Is aware of blend and balance					I	I	D	D	D
P.	Creates harmony parts						I	D	D	D
Q.	Knows appropriate tempo and mood				I	I	D	D	D	D
R.	Examines language (text) to develop expressive singing						I	D	D	D
S.	Produces a free, open, well-supported tone						I	D	D	D
T.	Adjusts to changing voice (uses total range)								I	D
II.	***Playing***									
A.	Uses rhythm band instruments	I	I	D	D	D				
B.	Accompanies on instruments (autoharp, bells, piano, etc.)			I	D	D	D	D	D	D
C.	Plays melodies by numbers, letters or syllables			I	D	D	D	D	D	D
D.	Makes and plays instruments (tin can, pop bottles, rubber band)				I	D	D	D	D	D
E.	Selects appropriate instruments to accompany songs (African song—drum; oriental song—gong)				I	D	D	D	D	D
F.	Plays tonettes or recorders				I	I	D			
G.	Plays by notation as well as by ear					I	D	D	D	D
H.	Accompanies by ear on the autoharp, etc.					I	D	D	D	D
I.	Produces new sounds on familiar instruments (autoharp with felt pick, bells with stick, etc.)					I	D	D	D	D
J.	Begins band, when available					I	I	D	D	D
K.	Decides appropriate tempo and mood						I	D	D	D
L.	Demonstrates an awareness of performance techniques—band						I	D	D	D
M.	Cultivates solo abilities—band						I	D	D	D
III.	***Rhythm***									
A.	Uses movement									
	1. Walking (steady beat)	I	I	D	D					
	2. Marching (beat trouping: heavy-light, left-right)	I	I	D	D	D				
	3. Skipping (uneven rhythm: short-long)	I	I	D	D	D				
	4. Hand clapping and tapping (imitating speech and language patterns—names, games, nursery rhymes)	I	I	D	D	D	D	D	D	D
	5. Simple dances (folk—round, line, square)	I	I	D	D	D	D	D	D	D
	6. Creative movement (guided)	I	I	D	D					
B.	Uses rhythm pattern as accompaniment			I	D	D	D	D	D	D
C.	Recognizes repitition			I	D	D	D			
D.	Ready rhythmic notation/rhythmic language (♩ ♫ ♫-ta titi ta ta)			I	D	D	D	D	D	D
E.	Distinguishes between ties and slurs			I	D	D	D	M		

Music

		K	1	2	3	4	5	6	7	8
F.	Knows name and value of notes and rests:									
	half note quarter note eighth note			I	D	D	D	M	R	R
	half rest quarter rest eighth rest			I	D	D	D	M	R	R
	whole note sixteenth note dotted note				I	D	D	D	D	D
	whole rest sixteenth rest				I	D	D	D	D	D
G.	Creates own rhythmic accompaniment to songs				I	D	D	D	D	D
H.	Combines rhythmic patters				I	D	D	D	D	D
I.	Counts beats		I	I	D	D	D	M	R	R
J.	Recognizes accented and unaccented beats				I	I	D	D	D	D
K.	Divides music into measures, recognizes anacrusis (pick up)					I	D	D	D	D
L.	Identifies dance forms (waltz, polka, tango, etc.)					I	I	D	D	D
M.	Hears syncopation						I	D	D	D
N.	Recognizes changing meter						I	D	D	D
IV.	***Theory***									
A.	Identifies the staff, lines, spaces and treble clef			I	D	D	D	M	R	R
B.	Identifies sharps, flats, naturals				I	D	D	M	R	R
C.	Identifies key signature					I	I	I	D	D
D.	Knows repeat signs: 1 1 D.C. al fine D.S. al fine				I	D	D	D	D	D
E.	Recognizes grand staff (treble and bass clef , C clef and Do clef							I	D	D
F.	Knows time signature				I	D	D	D	D	D
G.	Is aware of uncommon time signatures							I	D	D
V.	***Listening***									
A.	Identifies melodic characteristics									
	1. up-down-unison (repeated tones)	I	I	D	D	D				
	2. repetition	I	I	D	D	D				
	3. pitch (high-low)	I	I	D	D					
	4. volume (loud-soft)	I	I	D	D	D				
B.	Understands sound stories—mood (happy, sad, scary, etc.)	I	I	D	D	D				
C.	Is exposed to music based on legend, stories and fairy tales				I	D	D	D	D	D
D.	Is aware of program music (tells a story)						I	D	D	D
E.	Recognizes and cultivates appreciation of									
	1. records, tapes, etc. (exposure to various types of music)	I	I	D	D	D	D	D	D	D
	2. Common instruments and combinations (piano, drum, woodwinds, orchestral)	I	I	D	D	D	D	D	D	D
	3. families of instruments			I	I	D	D	D	D	D
	4. orchestral, symphony, jazz, country, rock, folk, spiritual, religious, chamber (smaller groups, string quartets)			I	I	I	D	D	D	D
	5. nursery rhymes	I	I	D	D					
F.	Recognizes patterns through sound identification		I	D	D	D	D	D	D	D
G.	Identifies song titles through melody		I	I	D	D	D	D	D	D
H.	Distinguishes major and minor keys					I	I	D	D	D
I.	Identifies chromatics (scale)							I	D	D
J.	Is familiar with common form									
	1. AB-ABA (two different sections AB= verse/refrain)			I	D	D	D	D	D	D
	2. ABAA-ABC; codas—introduction, etc.					I	D	D	D	D
	3. suites, opera, symphonic, concerto, rondo, electronic					I	D	D	D	D
K.	Hears chord changes					I	D	D	D	D
L.	Compares major, minor and pentatonic scales						I	D	D	D
M.	Identifies composers and their music						I	D	D	D
N.	Discerns dissonance (some 20th century music)							I	D	D
O.	Has a responsible awareness of personal choices in musical enjoyment								I	D
P.	Is aware of live music in youth/adult environment								I	D
Q.	Participates in musical activities outside the school								I	D

		K	1	2	3	4	5	6	7	8
I.	***Is aware of aging process***									
A.	Nature of physiological and psychological aging	I	I	I	I			D	D	M
B.	Promotion of useful roles for all citizens	I	I	I	I			D	D	M
C.	Changes in personality related to continued development of individual	I	I	I	I			D	D	M
II.	***Knows the use and misuse of substances***									
A.	Use of substances	I	I	I	I					
B.	Precautions	I	I	I	I					
C.	Decision-making	I	I	I	I					
D.	Alternatives	I	I	I	I					
E.	Responsibility for prevention	I	I	I	I					
III.	***Demonstrates personal health***									
A.	Wellness	I	I	I	I			M	M	M
B.	Physical fitness and relaxation	I	I	I	I			M	M	M
C.	Dental health	I	I	I	I			M	M	M
D.	Vision and hearing	I	I	I	I			M	M	M
E.	Posture and body mechanics	I	I	I	I			M	M	M
IV.	***Is aware of community health promotion***									
A.	Community health resources	I	I	I	I			D	D	D
B.	Health planning	I	I	I	I			D	D	D
C.	Environmental health	I	I	I	I			D	D	D
D.	Health careers	I	I	I	I			D	D	D
V.	***Is aware of consumer health***									
A.	Health products and services	I	I	I	I	D			M	M
B.	Health misconceptions	I	I	I	I	D			M	M
C.	Consumer protection agencies	I	I	I	I	D			M	M
D.	Cultural aspects of health care	I	I	I	I	D			M	M
VI.	***Demonstrates positive mental-emotional health***									
A.	Acceptance of self and others	I	I	I	I	D	D	D	M	M
B.	Coping with stress and anxiety	I	I	I	I	D	D	D	M	M
C.	Resolving problems	I	I	I	I	D	D	D	M	M
VII.	***Is aware of control and prevention of disease***									
A.	Causal factors—lifestyle, environment, genetics, medical system	I	I	I	I					
B.	Prevention and control	I	I	I	I					
C.	Reducing risks to good health	I	I	I	I					
D.	Healthful practices	I	I	I	I					
E.	Economic factors and health care	I	I	I	I					
VIII.	***Knows about family life and human sexuality***									
A.	Physical development and human reproduction	I	I	I	I	D	D		M	M
B.	Interpersonal skills and behavior—preparation for marriage and parenthood	I	I	I	I	D	D		M	M
C.	Enhancement of self-esteem	I	I	I	I	D	D		M	M
D.	Responsible decision-making	I	I	I	I	D	D		M	M
E.	Understanding love	I	I	I	I	D	D		M	M

		K	1	2	3	4	5	6	7	8
IX.	***Demonstrates nutrition***									
A.	Selection and use of foods	I	I	I	I				M	M
B.	Obesity and weight maintenance	I	I	I	I				M	M
C.	Food fads and fallacies	I	I	I	I				M	M
D.	Basic food nutrients	I	I	I	I				M	M
E.	Food protection	I	I	I	I				M	M
X.	***Knows health protection—safety education***									
A.	Accident prevention	I	I	I	I	D	D	D	D	M
B.	Emergency health care	I	I	I	I	D	D	D	D	M

Physical education is an integral part of the total development of the individual through the medium of human movement. It provides for reinforcement of activities done in other subject areas. It recognizes that each child is unique and matures and develops at different times to different ability and skill levels. Physical education is the "cornerstone" for good health and should develop sound health knowledge, values and attitudes that last a lifetime.

PHYSICAL EDUCATION

	K	1	2	3	4	5	6	7	8
I. Psychomotor Domain									
A. Basic movement									
1. Locomotor—moving from one spot to another									
a. Walks—varying speed, direction, levels (high, medium, low)	I/D	I/D	I/D	E					
b. Runs—varying speed, direction level	I/D	I/D	I/D	E					
c. Slides (step-close)	I/D	I/D	I/D	E					
d. Jumps—takes off on one or both feet landing on both	I/D	I/D	I/D	E					
e. Leaps—jumps from one foot, landing on opposite foot	I/D	I/D	I/D	E					
f. Hops—moves from one foot to same foot or both to both	I/D	I/D	I/D	E					
g. Gallops—(step-close-step with same foot leading)	I/D	I/D	I/D	E					
h. Skips—(step hop on same foot, alternate lead foot)	I/D	I/D	I/D	D/E	D/E				
i. Balances—with moving student	I/D	I/D	I/D	D/E	D/E				
2. Nonlocomotor—body movement from a stationary position									
a. Bends—opening and closing body joint	I/D	I/D	D/E						
b. Stretches—reaching in all directions and levels	I/D	I/D	D/E						
c. Swings—movement occurs below point of support	I/D	I/D	D/E						
d. Sways—movement occurs above point of support	I/D	I/D	D/E						
e Twists—facing a new direction (without moving base of support)	I/D	I/D	D/E						
f. Turns—facing a new direction (move base of support)	I/D	I/D	D/E						
g. Pushes—force away from body	I/D	I/D	D/E						
h. Pulls—force toward body	I/D	I/D	D/E						
i. Rises—moving from lower level to higher level	I/D	I/D	D/E						
j. Falls—moving from high level to lower	I/D	I/D	D/E						
k. Balances—with student in stationary position	I/D	I/D	D/E						
3. Manipulative—handling an object or an implement									
a. Strikes a stationary object with a body part (kicking a stationary ball)	I	I	D	D/E					
b. Strikes a moving object with a body part (tetherball)		I	D	D	D	D	D	D	D/E
c. Strikes a stationary object with an implement (golf)		I	D	D	D	D	D	D	D/E
d. Strikes a moving object with an implement (baseball)			I	D	D	D	D	D	D/E
e. Strikes a moving object with an implement while body is moving (tennis)					I	D	D	D	D/E
f. Throws an object (overarm, sidearm, underarm)	I	I	D	D	D	D	D	D	D/E
g. Catches a moving object while stationary (hands)	I	I	D	D	D	E			
h. Catches a moving object while moving (hands)	I	I	D	D	D	D	D	E	
i. Catches a moving object while stationary (feet-trap)	I	I	D	D	D	E			
j. Catches a moving object while moving (feet-trap)				I	D	D	D	D	D
4. Spatial awareness—where the body is moving									
a. Demonstrates directions—backward, sideways, forward	I	I	D	E					
b. Demonstrates levels—high, medium, low	I	I	D	E					
c. Demonstrates pathways—floor, air, straight, curved, zig-zag	I	I	D	E					

	K	1	2	3	4	5	6	7	8
B. Forms of Movement									
1. Gymnastics									
a. Performs rolls									
(1) log, forward, egg and shoulder rolls, rocker	I	I	D	D	D	D	D	D	D/E
(2) forward rolls in pike, tuck and straddle, backward, fish-flop			I	D	D	D	D	D	D/E
(3) backward roll in pike, tuck, and straddle, roundoff, dive and forward roll (snake or chain)				I	D	D	D	D	D/E
(4) headstand to a forward roll, kip-up, Eskimo roll, monkey roll cartwheel					I	D	D	D	D/E
b. Performs balances—static to dynamic									
(1) stork, frog, and shoulder (bicycle) balance, bridge-up	I	I	D	D	D	D	D	D	D/E
(2) tripod, v-sit, crane dive, dishrag, heel slap			I	D	D	D	D	D	D/E
(3) headstand, heel click, wheelbarrow, leap frog					I	D	D	D	D/E
(4) pull up to a headstand, elephant walk, Russian bear dance, fan						I	D	D	D/E
(5) box, swan, bear hug, handstand to backbridge, handstand to walkover							I	D	D/E
(6) swan walkover, angel stand, create tumbling combinations								I	I
c. Apparatus									
Uses activities from I and II in conjunction with appropriate apparatus (the following three progressions are examples):									
(1) lay rope on floor, children walk forward, sideways, backward at a medium level while bouncing a ball with one hand	I	I							
(2) lay a 2 x 4 on floor, children alternate leg hop along beam tossing and catching beanbag			I	I	I				
(3) raise 2 x 4 off floor on safe support, children skip forward and backward while twisting arms at a high level							I	I	I
2. Rhythms									
a. Creative									
(1) responds physically to rhythmic beat—clap, stamp, snap fingers	I	I							
(2) Impersonates animals and other characters in one's environment to music	I	I							
(3) puts locomotor and nonlocomotor movements creatively to music	I	I	D	D	D	D	D	D	D/E
b. Structured									
(1) learns steps or movements to specific dances	I	I	D	D	D	D	D	D	D/E
(2) learns singing games such as London Bridge, Hokey Pokey, Mulberry Bush, Skip to My Lou, etc.	I	I	D	D	D/E				
(3) learns square and folk dance, exercises to music, tinikiling, Virginia reel, Pop Goes the Weasel, Glow Worm, Danish dance				I	I	D	D	D	D/E
3. Games									
a. Learns traditional games									
(1) low-organized games such as Mother May I, red light-green light	I	I	D/E						
(2) Lead-up games—balloon or beach volleyball, t-ball, etc.				I	D	D/E			
(3) traditional games—volleyball, baseball, soccer, etc.					I	D	D	D	D/E
b. Plays original games—games invented by students and/or teacher									I/D
C. Physical fitness—consisting of cooperative games, new games, interdisciplinary games									
1. Demonstrates endurance (muscular and cardiovascular) distance running (jogging) or running in place, bicycling, swimming, jumping rope	I	I	D	D	D	D	D	D	D/E
2. Demonstrates strength—pull-ups, push-ups, lifting weights, isometrics	I	I	D	D	D	D	D	D	D/E

	K	1	2	3	4	5	6	7	8
3. Demonstrates flexibility—windmill, toe-touch, arm circles, trunk twist, back arch	I	I	D	D	D	D	D	D	D/E
4. Passes physical fitness tests—AAHPERD test manual, AAU test manual, others	I	I	D	D	D	D	D	D	D/E
II. Affective Domain									
A. Relates to feelings, values and attitudes toward movement This physical education program should promote:									
1. interest in and appreciation of movement	I	I	D	D	D	D	D	D	D/E
2. positive self-image (self-worth)	I	I	D	D	D	D	D	D	D/E
3. responsibility to self, others, school, etc.	I	I	D	D	D	D	D	D	D/E
4. effective social relationships (cooperation, fair play, loyalty, sportsmanship, etc.)	I	I	D	D	D	D	D	D	D/E
5. personal satisfaction	I	I	D	D	D	D	D	D	D/E
6. leadership abilities	I	I	D	D	D	D	D	D	D/E
III. Cognitive Domain									
A Relates to the body of knowledge involved in human movement. This physical education program should accomplish:									
1. skill activitiy and game knowledge (rules, health, strategy technique)	I	I	D	D	D	D	D	D	D/E
2. understanding and application of principles of efficient body movements	I	I	D	D	D	D	D	D	D/E
3. understanding and application of principles of physical fitness concepts	I	I	D	D	D	D	D	D	D/E
4. understanding the role of human movement in adult life	I	I	D	D	D	D	D	D	D/E